

Amendment to the Specification

Amend the paragraph beginning at page 14, line 10 as follows:

-- Referring to Figure 1, an array antenna receiver system for receiving signals from a plurality of user transmitters (not shown) comprises an array antenna having a plurality of antenna elements, specifically N elements $22/1, \dots, 22/N$, each coupled to a respective one of a corresponding plurality of RF front-end processing units $26/1, \dots, 26/N$ of an RF receiver section 26, which units treat the signals from the antenna elements to produce N antenna signals x_1, \dots, x_N , respectively. Each of the RF front-end units $26/1, \dots, 26/N$ has its output coupled to the input of each of a set of $M+1$ filters, specifically subspace filters, $40/0, \dots, 40/M$ of a common preprocessing section 40. Each of the subspace filters $40/0, \dots, 40/M$ is matched to a respective one of an ensemble of $M+1$ transmitting users, and has its output coupled to the input of each of a corresponding plurality of user-specific signal processors $60/0, \dots, 60/M$ of a signal processing section 60. Each of the signal processors $60/0, \dots, 60/M$ processes the respective set of the basis, specifically subspace, signals y_0, \dots, y_M of the subspace filters $40/0, \dots, 40/M$, respectively, to produce a corresponding one of a plurality of estimates z_0, \dots, z_M of the signals s_0, \dots, s_M transmitted by the $M+1$ users. --